

Subject Index

A

- Activin
 - presence of, in fetal and adult gonads, 1
 - role of, in ovarian physiology, 29
- Activin A, effect of, on primary follicles, 48
- Adrenal carcinoma, 131
- Adrenal gland, fetal and adult, activin and inhibin in, 5
- Adrenarche, exaggerated, 104
- Alpha-inhibin-92, 57
- Androgen metabolism, peripheral, markers of, 130
- Androgen secretion, gonadotropic regulation of, 163
- Androgens
 - adrenal, 129
 - polycystic ovarian syndrome and, 124
- Androstenedione, 127
- Antiandrogens, therapeutic use of, 243
- Assisted reproduction techniques in polycystic ovarian syndrome, 280

B

- Biostatistical procedures, 208, 212
- Body composition in polycystic ovarian syndrome, 115
- Bromocriptine, 274

C

- Caribbean Hispanic women, 62
- Central precocious puberty, congenital adrenal hyperplasia complicated by, 250
- Clinical evolution of polycystic ovarian syndrome, 229
- Clinical features of 21-hydroxylase deficiency, 197
- Clinical parameters in Diane-35 therapy, 264
- Clinical picture, classical, of polycystic ovarian syndrome, 231
- Clinical significance of ultrasound-diagnosed polycystic ovaries, 219
- Clinical signs of hyperandrogenism in Diane-35 therapy, 257
- Clomiphene, 92, 296
- Cluster analysis, 208, 215
- Congenital adrenal hyperplasia, central precocious puberty complication of, 250
- Contraceptives, oral, 93, *see* Diane-35
- Corticotropin-releasing hormone, presence of, in ovaries, 20
- Cyproterone acetate, *see* Diane-35

D

- Dexamethasone, therapeutic use of, 243
- Dexamethasone suppression test, relation of, to nafarelin test, 174
- Diabetes mellitus, non-insulin dependent, 60

- Diagnostic considerations, overview of, in polycystic ovarian syndrome, 235
- Diagnostic dilemmas in polycystic ovarian syndrome, 230
- Diane-35 (cyproterone acetate)
 - open one-year study with, 263
 - oral contraceptive containing, 255
- Diet, changes in the insulin-like growth factors—insulin-like growth factor-binding protein system induced by, 91
- Dopamine agonists, benefit of therapy with, 272

E

- Embryo transfer, 280
- Endocrine role in polycystic ovarian syndrome, 100
- Enzyme, adrenal, diagnosis and effects of, 195
- Estradiol, 288
- Estrogen-progestin preparations, therapeutic use of, 243
- Etiological factors in polycystic ovarian syndrome, 112

F

- Fat distribution, regional, in polycystic ovarian syndrome, 115
- Follicle, primary, spontaneous maturation of, 46
- Follicle-stimulating hormone
 - release of, by hypothalamic peptides, 55
 - serum and follicular fluid, 155
 - threshold principle of, 296
 - up-regulation of granulosa cell insulin-like growth factor-1 by, 10
- Follicular fluid α -immunoreactive inhibin, 288
- Follistatin, role of, in ovarian physiology, 29
- Free α subunit, secretion of, controlled by gonadotropin-releasing hormone, 187
- Frequency of gonadotropin-releasing hormone secretion, hypothesis regarding, 184, 238
- Frozen embryo transfer, 285
- Functional hypothalamic amenorrhea, polycystic ovarian syndrome versus, 116

G

- Gadolinium, 224, 228
- Gonadotropin-releasing hormone
 - estimation of quantity of, 188
 - ovarian hyperandrogenism and, 162
- Gonadotropin-releasing hormone agonist test, diagnostic implications of, 173
- Gonadotropin-releasing hormone agonists, chronic use of, 244
- Gonadotropin-releasing hormone pulse frequency, increasing, 183

- Gonadotropins
immunoreactive, estimates of, 156
polycystic ovarian syndrome and, 150
serum, pulsatile secretion of, 136
- Gonads
fetal, activin and inhibin in, 1
regulation of inhibin, activin, and follistatin in, 32
- Granulosa cells
action of inhibin and activin on, 33
binding sites for insulin-like growth factor-1 in, 10
effects of transforming growth factor- β s on, 15
insulin-like growth factor gene expression in, 70
- H**irsute women
Diane-35 treatment of, 255
pulsatile secretion of serum gonadotropins in, 136
- Hormonal status of women with polycystic ovarian syndrome, 116
- Hormone levels in Diane-35 therapy, 257
- Hybrid receptors, insulin/insulin-like growth factor-1, 79
- 17-Hydroxylase, molecular mechanisms of, 170
- 21-Hydroxylase deficiency, 195
- Hyperandrogenemia
diagnostic considerations in, 239
difficult to manage, 247
- Hyperandrogenism
adrenal, relation of functional ovarian hyperandrogenism to, 177
clinical signs of, in Diane-35 therapy, 257
difficult to manage, 247
screening for, 127
- Hyperinsulinemia
relationship between, and obesity, 91
skin lesion and, 60
- Hyperplasia, nonclassical congenital adrenal, polycystic ovarian syndrome and, 193
- Hypothalamus, areas of, that control follicle-stimulating hormone and luteinizing hormone secretion, 55
- I**n vitro fertilization, 280
serum and follicular steroids in, 288
- Inhibin
effect of, on follicle-stimulating hormone secretion, 102
presence of, in fetal and adult gonads, 1
role of, in ovarian physiology, 29
serum and follicular fluid α -immunoreactive, 288

- Insulin abnormalities in polycystic ovarian syndrome, 240
- Insulin receptor kinase mutations, dominant negative effect of, 79
- Insulin resistance, polycystic ovarian syndrome and, 60
- Insulin-like growth factor gene expression, human ovary and, 65
- Insulin-like growth factor-1
effect of, on primary follicles, 50
modulation of, in polycystic ovarian syndrome, 90
- Insulin-like growth factor-1 binding protein, modulation of, in polycystic ovarian syndrome, 90
- Insulin-like growth factor-1 receptors, transmembrane signaling by, 77
- Insulin-like growth factors, role of, in intraovarian regulation, 10
- Intramolecular autophosphorylation, mechanisms underlying, 82

- L**aparoscopy, 233
- Low-dose gonadotropin therapy in polycystic ovarian syndrome, 301
- Luteal cells, effects of transforming growth factor- β s on, 15
- Luteinizing hormone
ovarian renin-angiotensin system driven by, 39
relation of functional ovarian hyperandrogenism to, 174
release of, by hypothalamic peptides, 55
- Luteinizing hormone action, modulators of, 171
- Luteinizing hormone pulse frequency, increased, 185
- Luteinizing hormone pulse identification, 136, 152
- Luteinizing hormone-releasing hormone agonist analogue, 250
- 17,20-Lyase, molecular mechanisms of changes of, 170

- M**agnetic resonance imaging of polycystic ovaries, 224
- Meiotic competence acquisition, 48
- Metabolic status of women with polycystic ovarian syndrome, 116
- Miscarriage, 301
- Morphologic abnormalities in polycystic ovarian syndrome, 240
- Magnetic resonance imaging, major advantage of, over ultrasound, 229
- N**afarelin test, relation of, to dexamethasone suppression test, 174

- Neuroendocrine abnormalities in polycystic ovarian syndrome, 182, 237
- Nonclassical congenital adrenal hyperplasia, polycystic ovarian syndrome and, 193
- O**
- obesity
effect of, on outcome of treatment in polycystic ovarian syndrome, 302
relationship between, and hyperinsulinemia, 91
role of, in the pathophysiology of polycystic ovarian syndrome, 106
- Objective consideration of polycystic ovarian syndrome, obstacles to, 236
- Oocyte maturation
angiotensin involved in, 41
effects of transforming growth factor- β s on, 15
- Oocyte number and quality, disagreement concerning, 281
- Oral contraceptive, Diane-35 and, 255
- Ovarian androgen-secreting tumor, 131
- Ovarian hyperandrogenism
gonadotropin-releasing hormone as probe in, 162
ovarian androgenic abnormality in, 172
- Ovarian hyperstimulation syndrome, 285
- Ovarian renin-angiotensin system, polycystic ovarian syndrome and, 39
- Ovary
activin and inhibin in, 2
dysfunction of, gonadotropins and, 150
effect of insulin and insulin-like growth factor system on, 98
hormonally regulated insulin-like growth factor-1 expression in, 10
insulin-like growth factor gene expression in, 65
localization of ovarian renin-angiotensin system in, 39
polycystic
magnetic resonance imaging of, 224
ultrasound diagnosis of, 217
receptors of corticotropin-releasing hormone in, 20
stimulation of, response of insulin-like growth factor—insulin-like growth factor-binding protein system to, 92
transforming growth factor- β s in, 13
very large, 247
volume of, 258
significant decrease in, 265
- P**
- lactenta
activin and inhibin in, 5
insulin hybrid receptors in, 80
- Polycystic ovarian syndrome
androgens in, 124
assisted reproduction techniques in, 280
autocrine/paracrine role in, 101
body composition in, 115
classical clinical picture of, 231
diagnostic considerations in, overview of, 235
diagnostic dilemmas in, 230
Diane-35 treatment of, 255
dopamine agonists therapy in, 272
endocrine role in, 100
etiological factors in, 112
follicle-stimulating hormone threshold principle in, 296
four "schools" of approach to, 235
genetic linkage and, 61
gonadotropin-releasing hormone agonists therapy in, 242
gonadotropins in, 150
history of, 230, 235
insulin resistance in, 60
insulin-like growth factor modulation in, 90
interface between extra- and intraovarian factors in, 98
low-dose gonadotropin therapy in, 301
neuroendocrine abnormalities of women with, 182
nonclassical congenital adrenal hyperplasia and, 193
open one-year study with Diane-35 in women with, 263
ovarian renin-angiotensin system in, 41
prevalence of, 112
pulsatile secretion of gonadotropins in, 136
regional fat distribution in, 115
ultrasonography and biology in diagnosis of, 206
- Prolactin, 272
- Puberty, insulin resistance at, 105
- Pulsatile secretion of serum gonadotropins, 136, 152
- S**
- erum fluid α -immunoreactive inhibin, 288
- Serum gonadotropins, pulsatile secretion of, 136
- Sex steroid binding protein, 128
- Sex steroids, contraindications to treatment with, 247
- Side effects of chronic gonadotropin-releasing hormone agonist administration, 246
- Side effects of Diane-35 therapy, 259, 266
- Signaling, intrafollicular paracrine, 29
- Spikers, prolactin, 273
- Steroid 21-hydroxylase deficiency, 195
- Steroid feedback, luteinizing hormone secretion and, 155
- Steroidogenesis

- effect of angiotensin II on, 40
- gonadal, and its regulation, 163
- Subgroups, different polycystic ovarian syndrome phenotypic, 115

Testosterone
free, 128
total, 127

Transforming growth factor- α , effect of, on primary follicles, 51

Transforming growth factor- β
effect of, on primary follicles, 49
production and actions of, in ovary, 14-15

Thecal cells
action of inhibin and activin on, 32
effects of transforming growth factor- β s on, 15

Therapy
low-dose gonadotropin, 301
Diane-35, efficacy of, 265
use of Diane-35 in, 255, 263
use of gonadotropin-releasing hormone agonists in, 242
use of luteinizing hormone-releasing hormone agonists in, 250

Threshold principle, follicle-stimulating hormone, 296

Transmembrane signaling, molecular basis of, 77

Ultrasonographic abnormalities, ovarian, relation of functional ovarian hyperandrogenism to, 175

Ultrasonography, interrelationship between, and biology, 206

Ultrasound
improvements in polycystic ovarian syndrome diagnosis achieved with, 233
luteinizing hormone estimates as assessed by, 154
major advantage of magnetic resonance imaging over, 229

Ultrasound diagnosis of polycystic ovaries, 217

Visualization, problems of, in ultrasonography, 219

Zygote intrafallopian transfer, 283

Index of Contributors

Adams, J., 235-241
Adashi, E. Y., 10-12
Alvarado-Dubost, C., 124-135
Ardaens, Y., 206-216

Balint-Perić, L. A., 255-262
Barnes, R. B., 162-181
Battinos, M. L., xi, 230-234
Benahmed, M., 13-19
Beuscart, R., 206-216
Bondy, C., 65-76
Boulet, F., 115-124
Bringer, J., xiii-xv, 115-124, 224-229

Carcangiu, M. L., 39-45
Cavaleiro-Luna, A. M., 136-149
Charlet-Renard, Ch., 46-54
Chrousos, G. P., xiii-xv, 20-28
Courtieu, C., 224-229
Craves, J. C., 124-135
Crowley, W. F., Jr., 182-192, 235-241

Dacou-Voutetakis, C., 250-254
De Jong, F. H., 150-161
Déchaud, H., 124-135
Dewailly, D., 206-216
Dimitriadou, F., 288-295
Duhamel, A., 206-216
Dunaif, A., 60-64

Ehrmann, D. A., 162-181
Elstein, M. E., 263-271

Fausser, B. C. J. M., 150-161
Fimbel, S., 124-135
Fortes, M. A. H. Z., 136-149
Fossati, P., 206-216
Fox, R., 217-223
Franchimont, P., 13-19, 46-54
Franks, S., 112-114, 301-304
Frattali, A. L., 77-89

Gaspard, U., 46-54
Ghiglieri, C., 13-19
Giannella-Neto, D., 136-149
Golland, I. M., 263-271
Goni, M.-H., 242-249
Grigorescu, F., 115-123
Grimbizis, G., 280-287

Hall, J. E., 182-192, 235-241
Hamilton-Fairley, D., 301-304
Harrison, R. F., 272-279

Hazec-Hagelstein, M. T., 46-54
Hedon, B., 115-123
Hendrick, J. C., 13-19
Hillier, S. G., 29-38
Hull, M., 217-223

Jaffe, R. B., 1-9
Jaffiol, C., 115-123

Karidis, N., 250-254
Kiddy, D., 301-304

Laatikainen, T., 90-97
Laughlin, G. A., 98-111
Lefebvre, P., 115-124
Lejeune, H., 124-135
Lemaitre, L., 206-216

MMcCann, S. M., 55-59
Mantzavinos, Th., 288-295
Marcondes, J. A. M., 136-149
Mares, P., 224-229
Markussis, V., 242-249
Martin, K. A., 182-192, 235-241
Marubayashi, U., 55-59
Mastorakos, G., 20-28
Mathieu, A., 46-54
Maubon, A., 224-229
Mendonça, B. B., 136-149
Menezo, Y., 13-19
Minanni, S. L., 136-149
Miró, F., 29-38
Morales, A. J., 98-111
Morera, A. M., 13-19

Naftolin, F., 39-45
New, M. I., 193-205
Nicolas, M. H., 124-135

O'Moore, M., 272-279
O'Moore, R., 272-279
Orsetti, A., 115-123

Palumbo, A., 39-45
Pepperell, J., 39-45
Pessin, J. E., 77-89
Phocas, Iph., 288-295
Polson, D., 301-304
Pourmotabbed, G., 39-45
Prelević, G. M., 255-262
Pugeat, M., 124-135
Puzigaća, Ž., 255-262

Rabinovici, J., 1-9

Rego, M. A., 136-149
Renard, E., 115-123
Rizos, D., 288-295
Roa, L., 39-45
Robert, Y., 206-216
Rodbard, D., 136-149
Rosenfield, R. L., 162-181
Rouanet, J. P., 224-229

Sagle, M., 301-304
Sarandakou, A., 288-295
Saucerotte, H., 224-229
Schoemaker, J., 296-300
Sheikh, Z., 162-181
Spencer, S. J., 1-9
Sun, H-Q., 55-59
Synnott, M., 272-279

Tabone, E., 13-19

Tailland, M. L., 224-229
Tarlantzis, B. C., 280-287
Taylor, A. E., 182-192, 235-241
Tolis, G., xiii-xv, 242-249

Van der Meer, M., 296-300
van Weissenbruch, M. M., 296-300
Vezozzo, D. P., 136-149
Vivens, F., 224-229

Wajchenberg, B. L., 136-149
Watson, H., 301-304
Webster, E. L., 20-28
White, D. M., 112-114, 301-304

Yen, S. S. C., 98-111
Yu, W. H., 55-59

Zhou, J., 65-76
Zourlas, P. A., 288-295

